

I I Laser Targeting Device

SP

Installation and Startup

Option

Installation and Start-up

Valid for:
SIREMOBIL 2000 / Compact / ISO C / ISO C 3D
POWERMobil
ARCOKOP
ARCADIS systems

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Document revision level

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Required parts

NOTE

These instructions apply both to annual maintenance and replacement of laser diodes. See chapter 2, Maintenance, and chapter 3, Service.

- I.I. laser light localizer 30 99 988:
 - I.I. laser light localizer
 - Tension band for 17 cm (7"), 23 cm (9"), 27 cm (11") I.I. and 23 cm I.I. in combination with 3D Navigation
 - Labels
 - Set of batteries

Required aids

- Toolbox (including set of Allen keys)

Configurations

- The I.I. laser light localizer is available as an add-on for:
 - SIREMOBIL 2000 with 23 cm (9") I.I.
 - SIREMOBIL Compact with 23 cm (9") I.I.
with 17 cm (7") I.I.
 - SIREMOBIL Iso-C with 23 cm (9") I.I.
with 27 cm (11") I.I.
 - SIREMOBIL Iso-C 3D with 23 cm (9") I.I. in combination
with 3D Navigation
 - POWERMOBIL with 23 cm (9") I.I.
 - ARCOSKOP with 23 cm (9") I.I.
 - ARCADIS systems with 23 cm (9") I.I.

Installing the I.I. tension band

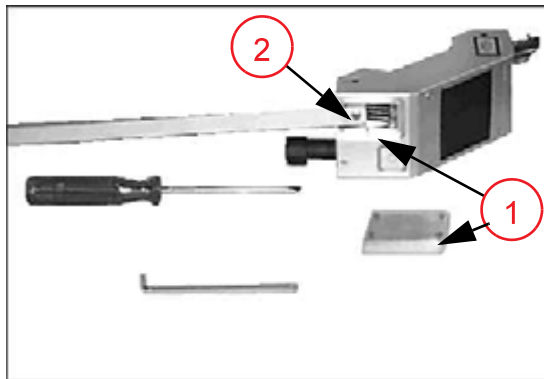


Fig. 1: I.I. tension band

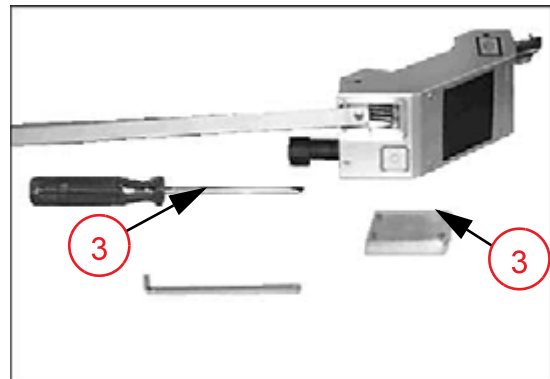


Fig. 2: I.I. tension band

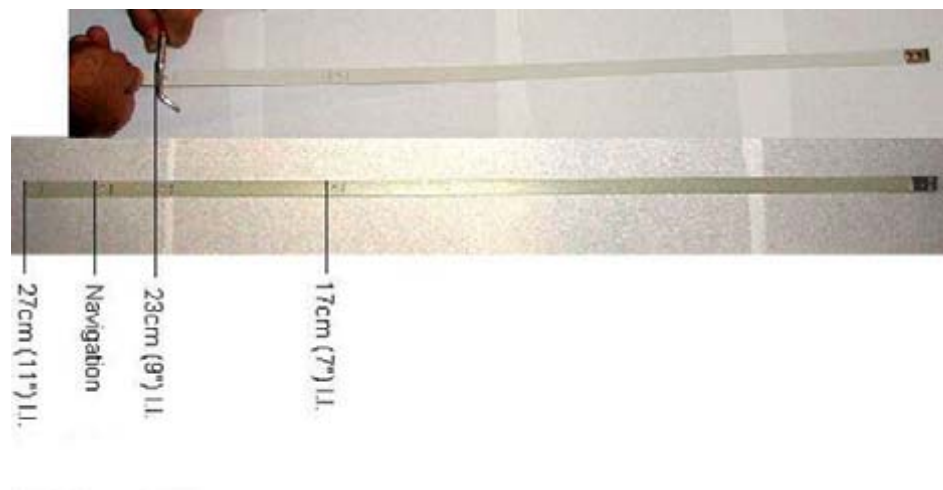


Fig. 3: Fracture points

- Remove the cover (1/Fig. 1 / p. 5) over the tension band.
- Remove the screw (2/Fig. 1 / p. 5).
- The tension band fits for the 27 cm I.I. For other I.I. sizes, the tension band has to be shortened at the marked fracture point. Apply flat pliers to the marked fracture point and bend several times until the band breaks ((Fig. 3 / p. 5) shows procedure for 23 cm I.I.).
- Secure the tension band using the screw (2/Fig. 1 / p. 5); secure screw with Loctite.
- Replace the cover (1/Fig. 1 / p. 5).

Adjusting the laser diodes to the I.I. size

- Loosen the clamping screws ([3/Fig. 2 / p. 5](#)) using the Allen key.
- Adjust the laser diodes to the I.I. size by pulling out or pushing in. There are 3 noticeable catches.
- For 17 cm (7") I.I.: Push in laser diodes until they lock into inside catch.
- For 23 cm (9") I.I. without 3D Navigation: Pull out laser diodes until they lock into center catch.
- For 27 cm (11") I.I. and 23 cm (9") I.I. with 3D Navigation: Pull out laser diodes until they lock into outside catch. Replace position plates ([Fig. 3 / p. 5](#)) with the position plates delivered.
- Retighten the two clamping screws.

Checking the settings

- Install the batteries in the battery compartment according to the operating instructions.
- Install the I.I. laser light localizer on the I.I. according to the operating instructions. Ensure that it is seated properly.
- Switch on the I.I. laser light localizer and align both laser beams with the tube focus. Turn both thumb wheels at the front side of the laser diodes (also see operating instructions).
- Move the C-arm into all end positions and check again if the laser beams can be aligned with the tube focus in every position.

NOTE

If the laser beams cannot be aligned with the tube focus in every C-arm position, you have to repeat the adjustment of the laser diodes to the I.I. size and the subsequent check of the settings.

Affixing the labels for the U.S.A.

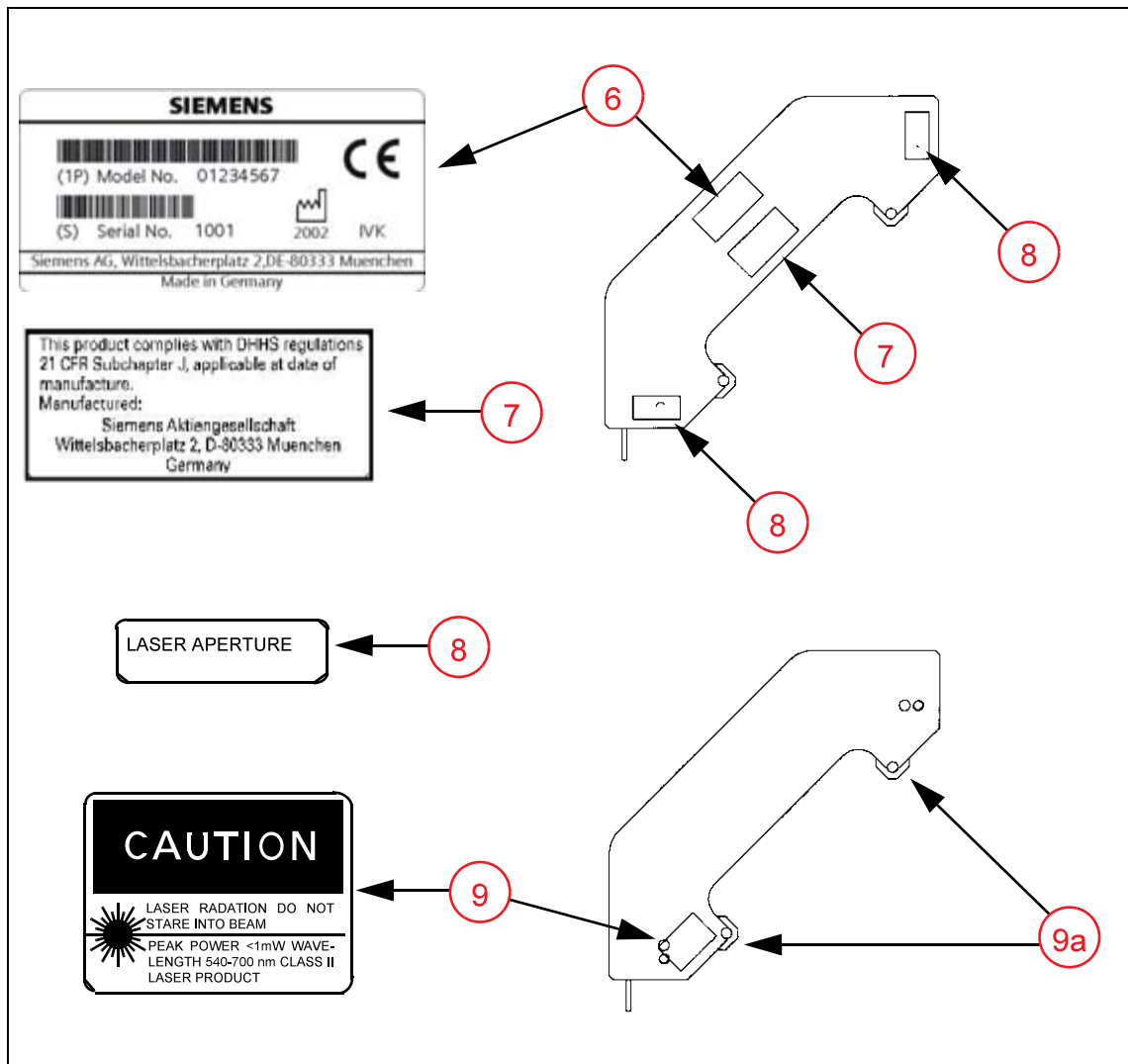


Fig. 4: Affixing labels for the U.S.A.

- Affix labels (8/Fig. 4 / p. 8) and (9/Fig. 4 / p. 8).
- Labels (6/Fig. 4 / p. 8) and (7/Fig. 4 / p. 8) are already affixed.

Affixing the labels for the rest of the world

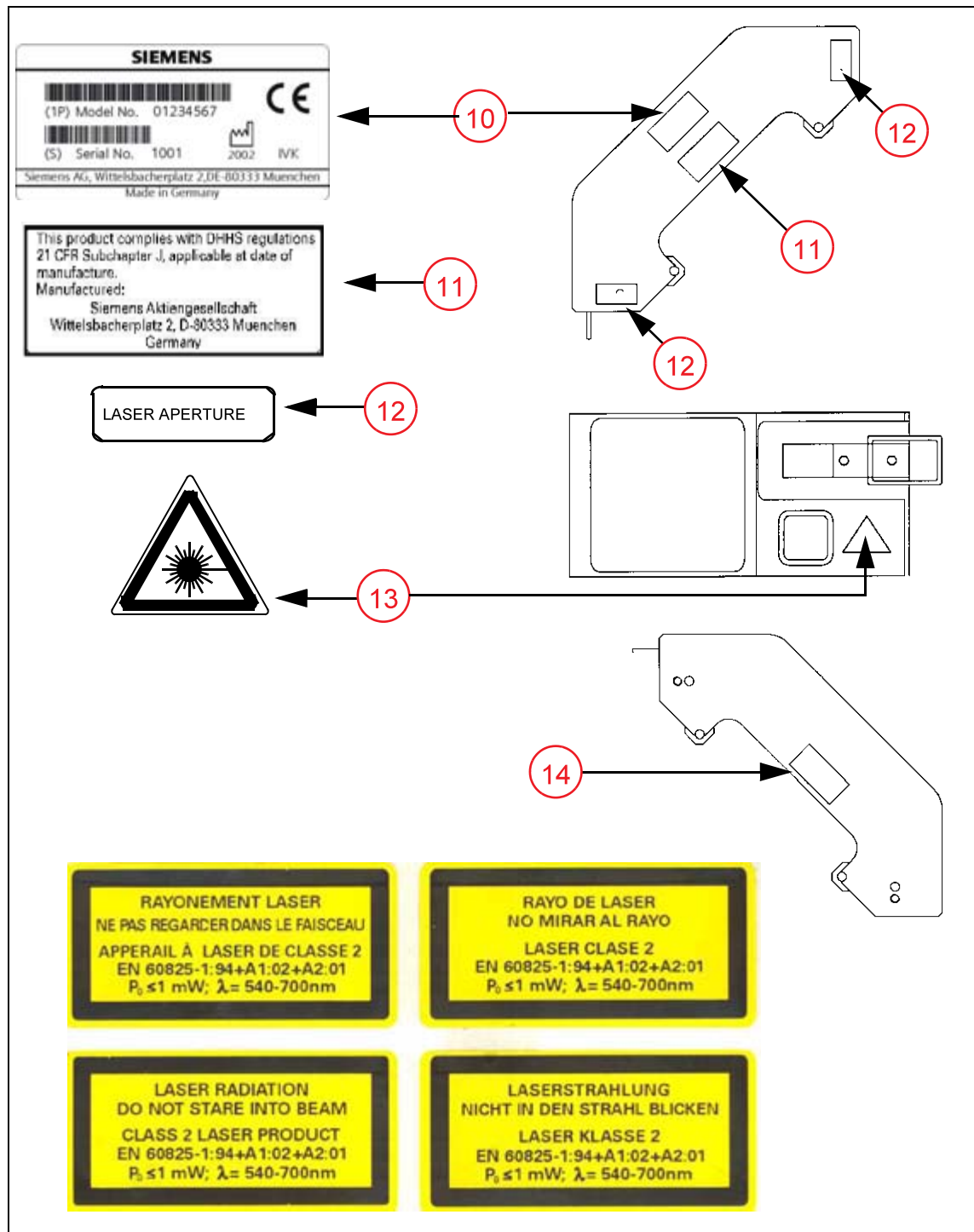


Fig. 5: Affixing labels for the rest of the world

- Affix labels (13/Fig. 5 / p. 9) to the locations indicated.
- Affix label (14/Fig. 5 / p. 9) in the local language.
- Labels (10/Fig. 5 / p. 9) and (11/Fig. 5 / p. 9) are already affixed.
- For Great Britain only: Also affix labels (12/Fig. 5 / p. 9).

Functional check

- Check the function of the two keys to switch the laser light localizer on and off.
- Switch the laser light localizer back on. The laser beams must go off automatically after approx. one minute.

Final steps

- File these instructions in Register 8, Service, in the system binder.

Mechanical safety

- Check the labeling of the laser light localizer according to [\(Fig. 4 / p. 8\)](#) or [\(Fig. 5 / p. 9\)](#) of chapter 2.
- Replace damaged labels.
- Ensure that the I.I. laser light localizer is seated properly on the I.I. Pay special attention to the tension band and the tension band closure.
- Check the I.I. ring for damage.
- Check the laser aperture for soiling and damage.
- Check the alignment of the laser beams with the tube focus. It must be possible to align the laser beams with the tube focus in all C-arm positions.
- Ensure that the batteries and the battery compartment are in good condition. Check for residue from battery acid and oxidation inside the battery compartment.

Checking the operating values

- Check the function of the two keys to switch the laser light localizer on and off.
- Switch the laser light localizer back on. The laser beams must go off automatically after approx. one minute.

Replacing the laser diodes

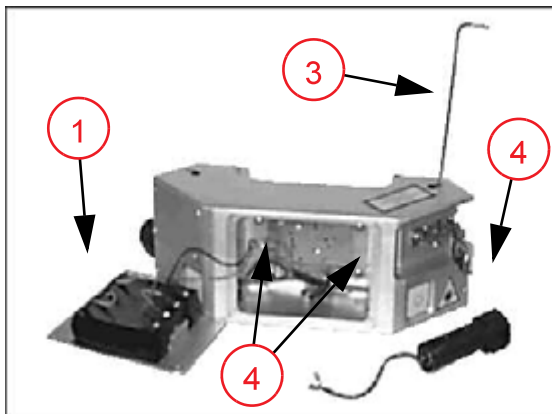


Fig. 6: Replacing the laser diodes

- Remove the batteries from the battery compartment.
- Unscrew the battery compartment (1/Fig. 6 / p. 14).
- Disconnect the cable of the defective laser diode (2/Fig. 6 / p. 14).
- Loosen the clamping screw of the defective laser diode (3/Fig. 6 / p. 14).
- Pull the laser diode out of the housing (4/Fig. 6 / p. 14).
- Insert the new laser diode into the housing (cable side first).
- Connect the cable.
- Replace the battery compartment.
- Insert the batteries into the battery compartment and close the compartment.
- Push in the laser diode until it catches. See also "Adjusting the laser diodes to the I.I. size" in this document.
- Retighten the two clamping screws.
- Install the I.I. laser light localizer on the I.I. according to the operating instructions. Ensure that it is seated properly.
- Switch on the I.I. laser light localizer and align both laser beams with the tube focus. Turn both thumb wheels at the front side of the laser diodes (also see operating instructions).
- Move the C-arm into all end positions and check again if the laser beams can be aligned with the tube focus in every position.

NOTE

If the laser beams cannot be aligned with the tube focus in every C-arm position, you have to repeat the adjustment of the laser diodes to the I.I. size and the subsequent check of the settings.

Functional checks

- Check the function of the two keys to switch the laser light localizer on and off.
- Switch the laser light localizer back on. The laser beams must go off automatically after approx. one minute.
- Also check the labeling.

Cover sheet changed